WHAT IS CLAIMED IS:

1. A miter saw comprising:

a motor having a spindle;

a saw base;

an arm connecting the motor to the saw base;

a blade secured to the spindle and rotated by the motor to cut a workpiece disposed on the saw base;

a light source mounted to the spindle and arranged to be rotated by the motor with the blade, the light source emitting a narrow beam of light adjacent the blade for providing a visual indication of the alignment of the blade with the workpiece; and

a moveable guard that pivots to cover at least a portion of the blade that is not engaging the workpiece, the guard having an opaque portion that blocks the beam of light to prevent the beam of light from being directed toward an operator of the saw.

2. The miter saw of claim 1 wherein the moveable guard includes a transparent area through which the narrow beam of light may pass to project a pattern of light on the workpiece.

3. The miter saw of claim 2 wherein the light transparent area comprises a non-opaque area formed in the opaque portion of the guard.

4. The miter saw of claim 2 wherein the guard is formed of a transparent material and wherein the opaque portion is formed by a mask and wherein the transparent area is formed as a gap in the mask.

5. The miter saw of claim 2 wherein the moveable guard comprises a pattern of transparent areas to project the emitted light beam on the workpiece as an interrupted pattern of light.

6. The miter saw of claim 1 wherein the light source is arranged to project the narrow beam of light beyond one end of the moveable guard to form a pattern of light on the workpiece while the blade engages the workpiece.

7. The miter saw of claim 1 wherein the saw base has a fence against which the workpiece may be pressed to locate one side of the workpiece.

8. The miter saw of claim 1 wherein the saw base has a pivoting portion that pivots relative to the blade and may be locked in a selected angular orientation for making a miter cut in a workpiece.

9. The miter saw of claim 1 wherein the moveable guard cooperates with a fixed guard portion to substantially enclose the blade and block the beam of light except for a small area encompassing the workpiece.

10. The miter saw of claim 1 wherein the light source is arranged to emit the light beam tilted toward the blade.

11. A saw comprising:

a motor having a spindle;

a saw base;

an arm connecting the motor to the saw base;

a blade secured to the spindle and rotated by the motor to cut a workpiece disposed on the saw base;

an arbor secured to the spindle;

a light source attached to the arbor and arranged to be rotated by the motor with the blade, the light source emitting a narrow beam of light adjacent the blade for providing a visual indication of the alignment of the blade with the workpiece; and

a moveable guard that pivots to cover at least a portion of the blade that is not engaging the workpiece, the guard having an opaque portion that blocks the beam of light to prevent the beam of light from being directed toward an operator of the saw and a transparent portion that allows the narrow beam of light

to pass through to create a line of light on the workpiece when the moveable guard is disposed between the laser and the workpiece.

12. The saw of claim 11 wherein the transparent portion comprises a pattern of transparent areas in the guard.

13. The saw of claim 11 wherein the transparent portion comprises a plurality of gaps in the opaque portion and wherein the guard is formed from a transparent plastic material.

14. The miter saw of claim 11 wherein the light source is arrange to project the narrow beam of light beyond one end of the moveable guard to form a pattern of light on the workpiece while the blade engages the workpiece.

15. The saw of claim 11 wherein the saw base has a fence against which the workpiece may be pressed to locate one side of the workpiece.

16. The saw of claim 11 wherein the saw is a miter saw having a base that has a pivoting portion that pivots relative to the fence and may be locked in a selected angular orientation for making a miter cut in a workpiece.

17. The saw of claim 16 wherein the saw is a compound miter saw having a tilt adjustment mechanism on the arm that connects the saw to the saw base.

18. The miter saw of claim 11 wherein the light source is arranged to emit the light beam tilted toward the blade.

19. The saw of claim 11 wherein the moveable guard cooperates with a fixed guard portion to substantially enclose the blade and block the beam of light except for the light passing through the transparent portion to the workpiece.

20. A miter saw comprising:

a motor having a spindle;

a saw base;

an arm connecting the motor to the saw base;

a blade secured to the spindle and rotated by the motor to cut a workpiece disposed on the saw base;

an arbor secured to the spindle, the arbor including an arbor base having a first mounting surface;

a light source secured to the arbor having a housing including a second mounting surface, wherein the first and second mounting surfaces are secured together in a range of angular orientations for precisely aligning the light source, the light source being rotated by the motor with the blade, the light source emitting a narrow beam of light adjacent and tilted toward the blade for providing a visual indication of the alignment of the blade with the workpiece.

21. A miter saw comprising:

a motor having a spindle;

a saw base;

an arm connecting the motor to the saw base;

a blade secured to the spindle and rotated by the motor to cut a workpiece disposed on the saw base;

an arbor secured to the spindle, the arbor including an arbor base having a first arcuate surface;

a light source secured to the arbor having a housing including a second arcuate surface, wherein the first and second arcuate surfaces that are secured together within a range of positions to precisely align the light source, the light source being rotated by the motor with the blade, the light source emitting a narrow beam of light adjacent and tilted toward the blade for providing a visual indication of the alignment of the blade with the workpiece.

22. The miter saw of claim 21 wherein the first and second arcuate surfaces are secured together by a set screw.

23. The miter saw of claim 21 wherein the first and second arcuate surfaces are secured together by a bonding agent.

24. A miter saw comprising:

a motor having a spindle;

a saw base;

an arm connecting the motor to the saw base;

a blade secured to the spindle and rotated by the motor to cut a workpiece disposed on the saw base;

an arbor secured to the spindle;

a light source mounted to the arbor and arranged to be rotated by the motor with the blade, the light source comprising at least one battery and emitting a narrow beam of light adjacent the blade for providing a visual indication of the alignment of the blade with the workpiece, the arbor having an arbor base to which the light source is secured and a cover to which the at least one battery is secured, wherein removal of the cover from the arbor base prevents inadvertent operation of the light source when the cover is so removed.

25. The miter saw of claim 24 wherein the light source is powered by a plurality of batteries and wherein all of the batteries are removed with the cover when the cover is removed.

26. The miter saw of claim 24 wherein the arbor base includes spring contacts arranged to establish electrical contact with the at least one battery only when the cover is properly secured to the arbor base.